Applicant submits that claims 6-10, 13-25 and 29 must be rejoined because the Examiner has indicated that generic claims 3 and 26 are allowable. 37 C.F.R. §1.141. All of the non-elected claims include the requirements of the allowed generic claims. Accordingly, rejoinder is necessary.

II. Objections to Specification

The specification has been amended at page 34, line 26 to change the reference from "Figures 19 and 20" to --Figures 17 and 18--. The figures now referenced do clearly show "the transmission".

The specification has been further amended at page 34, line 36 to change the reference character of the "pawl carrier" from "560" to --562--. As amended, the reference characters mentioned in the specification are believed to be associated with the correct parts in the drawings.

Accordingly, the objections to the specification are believed to be overcome.

III. Rejections under 35 U.S.C. §112

Claim 1 has been amended to replace "input power supply" and "output power supply" with --input means- and --output means--, respectively. The amendment is made at lines 16 and 17 (all line number references are to the lines as shown in the VERSION WITH MARKINGS TO SHOW CHANGES MADE attached hereto). Accordingly, these terms are the same as the terms earlier in the claim which provide antecedent basis.

Claim 4 has been amended generally in accordance with the Examiner's suggestion to recite "stationary, progressive or regressive orbital motion", and is believed to satisfy §112.

Claim 11 has been rewritten in independent form. Claim 11 has been further amended in line 20 to change "second orbit means" to --second orbital means--, in agreement with the antecedent basis for this term. Moreover, claim 11 now further specifies that the power transfer means includes "a first

assembler ring and a second assembler ring" (lines 8-9). In lines 21-22, the term "first and second assembly rings" has been changed to "first and second assembler rings". This agrees with the antecedent basis added by further definition of the power transfer means.

In claim 26, lines 15-18 introduce "a first assembler ring" and "a second assembler" ring. Thus, there is antecedent basis for "respective first and second assembler rings" appearing in line 21. Accordingly, this rejection should be withdrawn.

Claim 30 has not been amended. However, claim 26 (from which claim 30 depends) has been amended to specify "power transfer means" which comprises the first and second assembler rings. Accordingly, there is now both a "power transfer means" and a "second power transfer means". This is clear and definite and satisfies the requirements of §112.

Claim 31 has been amended to change "the first plurality of secondary means" to --the plurality of secondary members--. The amended term finds antecedent basis in claim 26, line 5.

Claim 32 has been amended to specify a first and a second orbital means, and clarify that these comprise a double orbiting system. Claim 32 further explains at lines 3-4 that the power transfer means undergoes orbital motion, so that antecedent basis for "orbiting power transfer means" is also provided. Accordingly, claim 32 satisfies §112.

Claim 34 has been amended at lines 17 and 18 to change "input power supply" and "output power supply" to --input means-- and --output means--, respectively. Antecedent basis is provided for these terms in lines 2 and 3 of claim 34. Accordingly, claim 34 satisfies §112.

Claim 35 satisfies §112, as originally written. Antecedent basis for "the activation point" in line 13 may be found in line 3 of claim 35. Accordingly, this rejection should be withdrawn.

Claim 42 satisfies §112, as originally written. Antecedent basis for "the orbit body" in lines 2-3 may be found in line 2 of claim 41. Accordingly, this rejection should be withdrawn.

All of the claims are now believed to satisfy the requirements of 35 U.S.C. §112.

IV. Rejections under 102(b)

Claim 1 has been amended to incorporate the requirements of claim 3, which was objected to solely on the basis of depending from a rejected base claim. Accordingly, claim 1 is believed to be in form for allowance. Claims 2 and 4-10 and 13-25, depending directly or indirectly from claim 1, are submitted as patentable for the same reasons as claim 1.

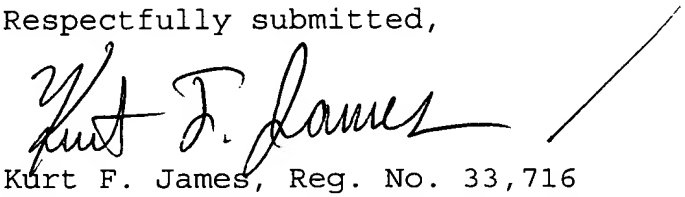
Claim 11, which was objected to solely on the basis of its dependence from a rejected base claim, has been rewritten in independent form. Accordingly, claim 11 is now in form for allowance. Claim 12, depending from claim 11, is also believed to be in form for allowance.

V. Conclusion

Applicant notes that claims 26-28 and 30-42 were indicated in the Office action of June 5, 2001 as being allowable if amended to overcome the rejections under §112 and to incorporate the requirements of any base or intervening claim. The rejections under §112 have been overcome, as noted above. Independent claims 26 and 34 have been found to be allowable. Accordingly, claims 27-33 and 35-42, depending directly or indirectly from claims 26 and 34 (respectively) are believed to be in form for allowance.

In view of the foregoing, applicant respectfully requests reconsideration and allowance of claims 1, 2 and 4-42.

Respectfully submitted,



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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

The paragraph at page 34, starting at line 11 has been amended as follows:

With reference to Figures 17 and 18, an input shaft 500 supplies input rotary power via a phase controller 501. The phase controller 501 is described in our previously mentioned copending international application. The input shaft 500 carries a first eccentric 502. The eccentric 502 has a cutout 503. A second input shaft 504 is mounted on the first input shaft 500 and is also driven via the phase controller 501. The second shaft 504 carries a second eccentric 506. An orbital body 510 is mounted on the eccentric 506. The orbital body 510 has a sleeve portion 510a arranged on the eccentric 506, a radially extending end wall section 510b and an outer diameter cylindrical section 510c. The wall 510b carries pins 512 which are received in an opening 514 of an orbit control plate 516 which is fixed stationary in the casing (not shown) of the transmission of Figures [19] 17 and [20] 18.

The paragraph on page 34, beginning at line 29 and continuing on to page 35, has been amended as follows:

The input shaft 500 has an end section 511 upon which is mounted an output shaft 530. The output shaft 530 has a flange section 532 which has holes 534. Mounted on the first eccentric 502 is an orbit control cylinder 540. The orbit control cylinder 540 has pins 542 at one end which engage in the openings 534 to control orbital motion of the cylinder 540. Arranged on the cylinder 540 is a forward motion pawl carrier 550 and a separate reverse motion pawl carrier [560] 562. Two rows of pawls 552 and 554 are pivotally coupled on the pawl carrier 550 by pins 553.

The pawls 552 carry shoes 555 which engage with assembler ring 556. The pawls 554 carry shoes 557 which engage assembler ring 558. Arranged between the assembler rings 556 and 558 is ring 560 and differential load distribution gear 580. As in previous [embodiment] embodiments, the ring 560 is fixed to the cylindrical portion 510c of the orbital body 510.

IN THE CLAIMS:

Claim 1 has been amended as follows:

Claim 1 (amended) A transmission including:

an input means;

an output means;

a plurality of secondary members for supplying output power for only part of each rotary cycle of the input means;

power transfer means for engagement with the plurality of secondary members;

the plurality of secondary members being coupled to one of the input means or the output means and the power transfer means being coupled to the other of the input means or the output means;

first orbital means for causing the plurality of secondary members to undergo orbital motion; [and]

second orbital means for causing the power transfer means to undergo orbital motion so the combined orbital motions cause power to be transmitted from the input [power supply] means to the output [power supply] means;

phase changing means for changing the phase relationship of the orbital motions to, in turn, change the drive ratio of the transmissions.

Claim 4 has been amended as follows:

Claim 4 (amended) The transmission of claim 1, wherein the orbital motion is one of a stationary, [orbital motion but in other embodiments the orbital motion could be either a] progressive or [a] regressive orbital motion.

Claim 6 has been amended as follows:

Claim 6 (amended) The transmission of claim 2, wherein the first [orbit] orbital means comprising a pawl carriage for carrying the first and second sets of pawls, the pawl carriage having an epicyclic plate, an orbital control plate adjacent the epicyclic plate and orbit control means between the orbital control plate and the epicyclic plate.

Claim 11 has been amended as follows:

Claim 11 (amended) [The] A transmission [of claim 1, wherein] including:

an input means;

an output means;

a plurality of secondary members for supplying output power for only part of each rotary cycle of the input means;

power transfer means for engagement with the plurality of secondary members, the power transfer means comprising a first assembler ring and a second assembler ring;

the plurality of secondary members being coupled to one of the input means or the output means and the power transfer means being coupled to the other of the input means or the output means;

first orbital means for causing the plurality of secondary members to undergo orbital motion; and

second orbital means for causing the power transfer means to undergo orbital motion so the combined orbital motions

cause power to be transmitted from the input means to the output means;

the second [orbit] orbital means [comprises] comprising an orbit body for carrying the first and second [assembly] assembler rings, the orbit body having an epicyclic plate, an orbital control plate adjacent the epicyclic plate and orbit control means between the orbital control plate and the epicyclic plate.

Claim 26 has been amended as follows:

Claim 26 (amended) The transmission mechanism including:

an input power supply for supplying input rotary power;

an output power supply for providing rotary output power;

a plurality of secondary members arranged between the input power supply [means] and the output power supply [means] for transmitting power from the input power supply [means] to the output power supply [means], the plurality of secondary members comprising at least a first array, including at least one secondary member, between the input power supply and the output power supply, and a second array including at least one further secondary number between the input power supply and the output power supply, the first and second arrays being in parallel with respect to one another;

power transfer means comprising a first assembler ring for engagement with the first array of secondary members[;], and a second assembler ring for engagement with the second array of further secondary members;

the secondary members of the first array and the secondary members of the second array being in engagement with respective first and second assembler rings through only part of each rotary cycle of the transmission mechanism; and

a load distributing gear engaged between the first and second assembler rings for differentially distributing the load taken by the secondary members between the said at least one

secondary member of the first array and the at least one further secondary member of the secondary array.

Claim 31 has been amended as follows:

Claim 31 (amended) The transmission of claim 30, wherein the [first] plurality of secondary [means] members are constrained so as to only engage the power transfer means in the region when the power transfer means and secondary members are closest during orbital movement of the secondary members and power transfer means.

Claim 32 has been amended as follows:

Claim 32 (amended) The transmission of claim 30, further comprising first orbital means for causing the secondary members to undergo orbital motion and second orbital means for causing the power transfer means to undergo orbital motion, the first and second orbital means producing a double orbiting system and wherein the double orbiting system produced by the first orbital means and second orbital means provides two drive phases, one on the closest approach side of the orbiting power transfer means to the orbiting plurality of secondary members to produce a counter phase orbit.

Claim 34 has been amended as follows:

Claim 34 (amended) A transmission including:

an input means;

an output means;

a first plurality of secondary members for supplying output power for only part of each rotary cycle of the input means in a first direction;

a second plurality of secondary members for supplying output power for only part of each rotary cycle of the input means in a reverse direction opposite the first direction;

power transfer means for engagement with the first plurality of secondary members and the second plurality of secondary members;

first orbit control means for causing the first and second plurality of secondary members to undergo orbital motion;

second orbital control means for causing the power transfer means to undergo orbital motion so the combined orbital motion causes power to be transmitted from the input means [power supply] to the output [power supply] means; and

means for selectively allowing supply of power between the first plurality of secondary members and the power transfer means in the first direction and supply of power between the second plurality of secondary members and the power transfer means in the reverse opposite direction first direction or the opposite reverse direction.